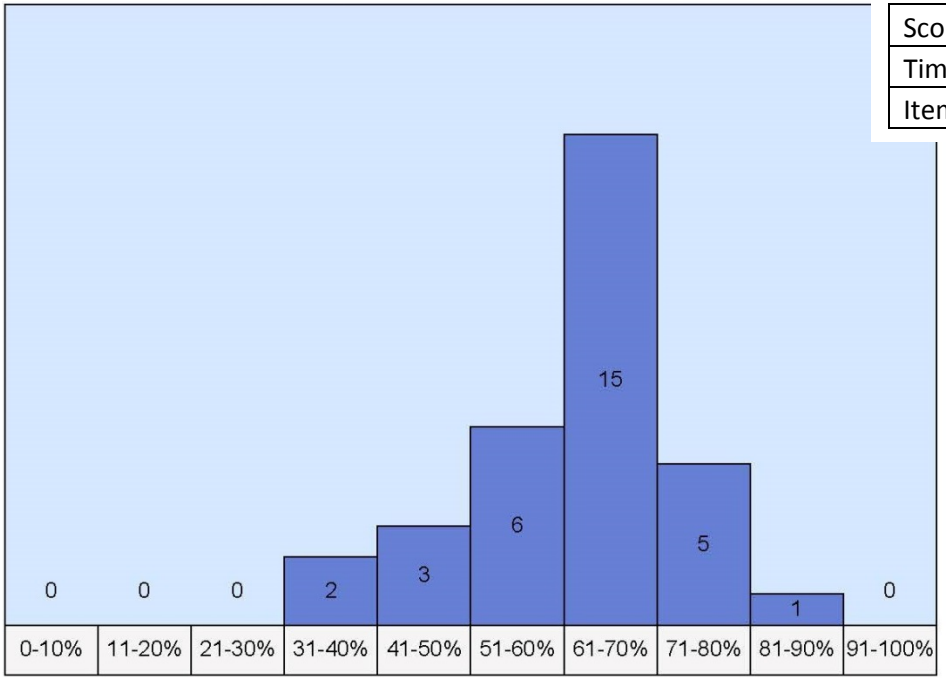
2013-14 State Results

Collision Repair Technology

32 Participants



	Min	Max	Mean
Score	37	82	61.88
Time	00:20:54	00:57:12	00:33:57
Items Answered	97	100	99.88

Average Score: 61.9
Cut Score: 60
Pass Percentage: 65.6%

Nevada Department of Education
Office of Career, Technical and Adult Education

Assessment: Collision Repair Technology
Accumulated results

1) Content Standard 1.0: Identify and Utilize Safety Procedures and Proper Tools	79.17%
1) Performance Standard 1.1: Demonstrate General Lab Safety Rules and Procedures	79.43%
1) 1.1.1 Describe general shop safety rules and procedures (i.e., safety test)	89.58%
2) 1.1.2 Utilize safe procedures for handling of tools and equipment	93.75%
3) 1.1.3 Identify and use proper placement of floor jacks and jack stands	76.56%
6) 1.1.6 Identify marked safety areas	82.81%
7) 1.1.7 Identify the location and the types of fire extinguishers and other fire safety equipment; demonstrate knowledge of the procedures for using fire extinguishers and other fire safety equipment	34.38%
9) 1.1.9 Identify the location of the posted evacuation routes	87.50%
10) 1.1.10 Comply with the required use of safety glasses, ear protection, gloves, and shoes during lab/shop activities	75.00%
2) Performance Standard 1.2: Identify and Utilize Proper Tools	78.13%
1) 1.2.1 Identify tools and their usage in automotive applications	82.81%
3) 1.2.3 Demonstrate safe handling and use of appropriate tools	68.75%
3) Content Standard 3.0: Demonstrate Damage Analysis, Estimating and Customer Service Skills	58.39%
1) Performance Standard 3.1: Identify Vehicle Construction and Parts	47.66%
1) 3.1.1 Identify type of vehicle construction (space frame, unibody, body-over-frame)	57.29%
7) 3.1.7 Identify vehicle glass components and repair/replacement procedures	18.75%
2) Performance Standard 3.2: Perform Damage Analysis	57.29%
3) 3.2.3 Analyze damage to determine appropriate methods for overall repairs	21.88%
9) 3.2.9 Identify structural damage using measuring tools and equipment	75.00%
3) Performance Standard 3.3: Demonstrate Estimating Procedures	61.72%
2) 3.3.2 Identify and record vehicle identification number (VIN) information, including nation of origin, make, model, restraint system, body type, production date,	78.12%
5) 3.3.5 Apply appropriate estimating and parts nomenclature (terminology)	9.38%
20) 3.3.20 Determine refinishing material and charges	28.12%
25) 3.3.25 Determine the cost effectiveness of the repair and determine the approximate vehicle retail, and repair value	81.25%
26) 3.3.26 Recognize the differences in estimation procedures when using different information provider systems	62.50%
27) 3.3.27 Verify accuracy of estimate compared to the actual repair and replacement operations	76.56%
4) Performance Standard 3.4: Demonstrate Customer Relations and Sales Skills	63.28%
2) 3.4.2 Listen to customer/client; collect information and identify customers/client's concerns, needs and expectations	71.88%
7) 3.4.7 Recognize basic claims handling procedures; explain to customer/client	37.50%
12) 3.4.12 Apply negotiation skills to obtain a mutual agreement	71.88%
4) Content Standard 4.0: Perform Non-Structural Analysis and Damage Repair (Body Components)	51.79%
1) Performance Standard 4.1: Demonstrate Inspection and Preparation Techniques	62.50%
1) 4.1.1 Review damage report and analyze damage to determine appropriate methods for overall repair; develop and document a repair plan	62.50%
2) Performance Standard 4.2: Perform Outer Body Panel Repairs, Replacements, and Adjustments	43.13%
1) 4.2.1 Determine the extent of direct and indirect/hidden damage and direction of impact; develop and document a repair plan	28.12%
2) 4.2.2 Inspect, remove, replace, and align hood, hood hinges, and hood latch	59.38%
3) 4.2.3 Inspect, remove, replace, and align deck lid, lid hinges, and lid latch	40.62%
4) 4.2.4 Inspect, remove, replace, and align doors, latches, hinges, and related hardware	34.38%

6) 4.2.6 Inspect, remove, replace, and align bumper bars, covers, reinforcement, guards, isolators, and mounting hardware	43.75%
7) 4.2.7 Inspect, remove, replace and align fenders, and related panels	9.38%
8) 4.2.8 Straighten contours of damaged panels to a suitable condition for body filling or metal finishing using power tools, hand tools, and weld-on pulling attachments	68.75%
9) 4.2.9 Weld damaged or torn steel body panels; repair broken welds	46.88%
13) 4.2.13 Diagnose and repair water leaks, dust leaks, and wind noise	31.25%
3) Performance Standard 4.3: Apply Metal Finishing and Body Filling Techniques	57.29%
1) 4.3.1 Remove paint from the damaged area of a body panel	75.00%
2) 4.3.2 Locate and repair surface irregularities on a damaged body panel	40.62%
3) 4.3.3 Demonstrate hammer and dolly techniques	68.75%
6) 4.3.6 Prepare and apply body filler	45.31%
4) Performance Standard 4.4: Inspect Moveable Glass and Hardware Components	45.83%
1) 4.4.1 Inspect, adjust, repair or replace window regulators, run channels, glass, power mechanisms, and related controls	42.19%
2) 4.4.2 Inspect, adjust, repair, remove, reinstall or replace weather-stripping	53.12%
5) Performance Standard 4.5: Perform Metal Welding and Cutting Techniques	59.38%
1) 4.5.1 Identify weldable and non-weldable substrates used in vehicle construction	87.50%
3) 4.5.3 Determine the correct GMAW (MIG) welder type, electrode/wire type, diameter, and gas to be used in a specific welding situation	37.50%
4) 4.5.4 Set up and adjust the GMAW (MIG) welder to tune for proper electrode stickout, voltage, polarity, flow rate, and wire-feed speed required for the substrate being welded	62.50%
7) 4.5.7 Use the proper angle of the gun to the joint and direction of gun travel for the type of weld being made in the flat, horizontal, vertical, and overhead positions	43.75%
10) 4.5.10 Clean and prepare the metal to be welded, assure good metal fit-up, apply weld-through primer if necessary, clamp or tack as required	70.31%
12) 4.5.12 Determine the type of weld (continuous, stitch weld, plug, etc.) for each specific welding operation	34.38%
13) 4.5.13 Perform the following welds: continuous, plug, butt weld with and without backing, fillet, etc	53.12%
14) 4.5.14 Perform visual and destructive tests on each weld type	75.00%
6) Performance Standard 4.6: Utilize Plastics and Adhesives	50.52%
1) 4.6.1 Identify the types of plastics; determine repairability	56.25%
2) 4.6.2 Clean and prepare the surface of plastic parts; identify the types of plastic repair procedures	25.00%
3) 4.6.3 Repair rigid, semi-rigid, or flexible plastic panels	45.31%
6) 4.6.6 Demonstrate the proper cleanup procedures for specific adhesives	75.00%
5) Content Standard 5.0: Perform Structural Analysis and Damage Repair	59.38%
1) Performance Standard 5.1: Demonstrate Inspection and Repair Techniques	59.38%
2) 5.1.2 Attach vehicle to anchoring devices	56.25%
3) 5.1.3 Determine the extent of the direct and indirect damage and the direction of impact; document the methods and sequence of repair	43.75%
4) 5.1.4 Analyze and identify crush/collapse zones	78.12%
6) Content Standard 6.0: Demonstrate Painting and Refinishing Techniques	67.86%
1) Performance Standard 6.1: Apply Safety Precautions	74.38%
1) 6.1.1 Identify and take necessary precautions with hazardous operations and materials according to federal, state, and local regulations	53.12%
2) 6.1.2 Identify safety and personal health hazards according to OSHA guidelines and the Right to Know Law	93.75%
4) 6.1.4 Select and use a NIOSH approved air purifying respirator. Inspect condition and ensure fit and operation. Perform proper maintenance in accordance with OSHA Regulation 1910.134 and applicable state and local regulation	68.75%
6) 6.1.6 Select and use the proper personal safety equipment for surface preparation, spray gun and related equipment operation, paint mixing, matching and application, paint defects, and detailing (gloves, suits, hoods, eye and ear protection, etc.)	87.50%

2) Performance Standard 6.2: Utilize Surface Preparation Techniques	73.44%
4) 6.2.4 Strip paint to bare substrate (paint removal)	93.75%
6) 6.2.6 Featheredge areas to be refinished	65.62%
11) 6.2.11 Apply primer onto surface of repaired area	100.00%
16) 6.2.16 Clean area to be refinished using a final cleaning solution	90.62%
23) 6.2.23 Identify the types of rigid, semi-rigid or flexible plastic parts to be refinished; determine the materials needed, preparation, and refinishing procedures	45.31%
3) Performance Standard 6.3: Perform Spray Gun and Related Equipment Operations	64.06%
3) 6.3.3 Test and adjust spray gun using fluid, air and pattern control valves	65.62%
4) 6.3.4 Demonstrate an understanding of the operation of pressure spray equipment	62.50%
4) Performance Standard 6.4: Utilize Paint Mixing, Matching, and Application Techniques	70%
2) 6.4.2 Shake, stir, reduce, catalyze/activate, and strain refinish materials	65.62%
3) 6.4.3 Apply finish using appropriate spray techniques (gun arc, angle, distance, travel speed, and spray pattern overlap) for the finish being applied	87.50%
5) 6.4.5 Apply single stage topcoat	78.12%
7) 6.4.7 Apply basecoat/clearcoat for overall refinishing	75.00%
12) 6.4.12 Identify and mix paint using a formula	43.75%
5) Performance Standard 6.5: Identify Paint Defects: Causes and Cures	58.93%
3) 6.5.3 Identify the presence of fish-eyes (crater-like openings) in the finish; determine the cause(s) and correct the condition	62.50%
6) 6.5.6 Identify orange peel; determine the cause(s) and correct the condition	37.50%
7) 6.5.7 Identify overspray; determine the cause(s) and correct the condition	43.75%
9) 6.5.9 Identify sags and runs in paint surface; determine the cause(s) and correct the condition	18.75%
17) 6.5.17 Identify corrosion; determine the cause(s) and correct the condition	78.12%
18) 6.5.18 Identify dirt or dust in the paint surface; determine the cause(s) and correct the condition	96.88%
26) 6.5.26 Identify buffing-related imperfections (swirl marks, wheel burns); correct the condition	75.00%
6) Performance Standard 6.6: Perform Final Detail Procedures	65.63%
2) 6.6.2 Sand, buff and polish fresh or existing finish to remove defects as required	62.50%
6) 6.6.6 Perform vehicle clean-up; complete quality control using a checklist	71.88%